

15 June 2023

Substantial Gravity Anomalies Defined Along Strike From BHP's Goldsworthy Iron Ore Mine

Highlights

- Two discrete highly dense anomalies defined at Goldsworthy East
 - Northern gravity target has a strike length of 1,600m, width of 200m and depth extent of 450m
 - Southern gravity target has a strike length of 1,100m, width of 215m and depth extent of 400m
- Northern target with coincident gravity high, topographic high and magnetic low interpreted to be prospective for hematite-type extensions of Goldsworthy
 - Target is located 1,500m along strike of BHP's Goldsworthy Iron Ore mine which previously produced 55Mt at 63.5% Fe between 1965 and 1982
- Goldsworthy East Iron Ore Project is located 100km from Port Hedland via existing roads and rail
- Site trip to assist with drill planning underway

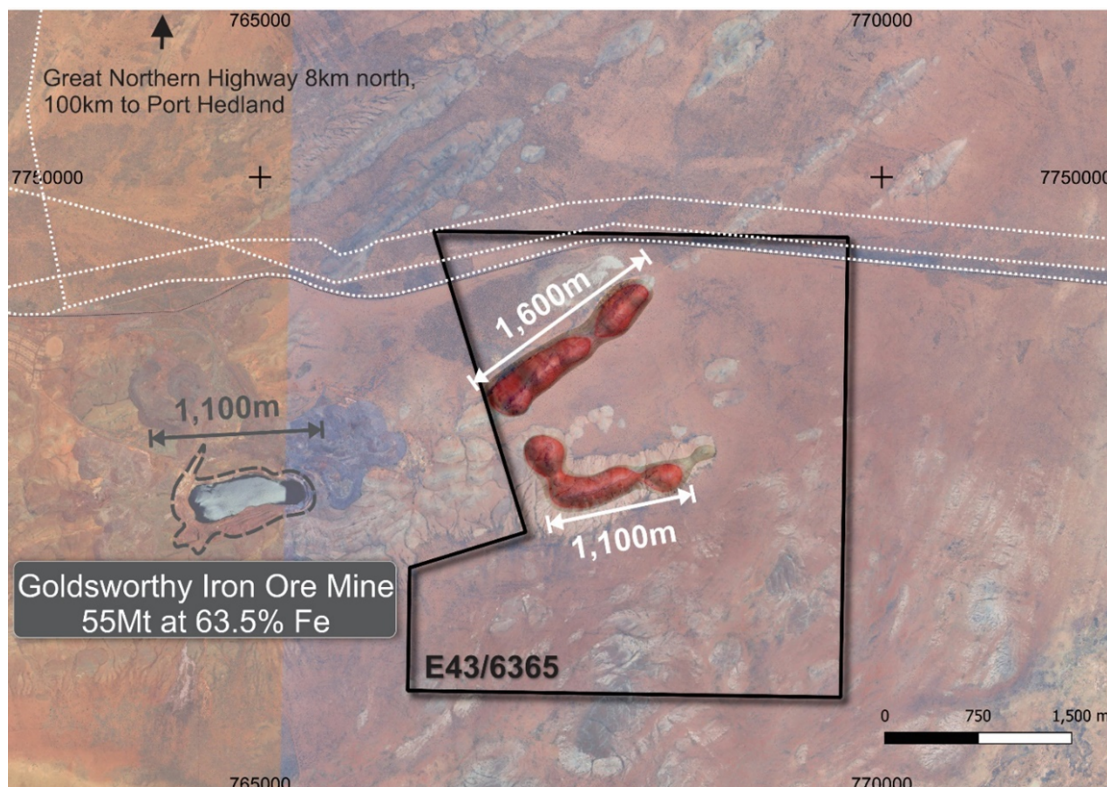


Figure 1: Gravity Inversion Models, 1,500m along strike from Goldsworthy Iron Ore mine.



MACRO METALS
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15 June 2023: Macro Metals Limited (ASX:M4M, “Macro” or “the company”) is pleased to announce the results of a gravity survey completed across the Goldsworthy East Iron Ore Project Goldsworthy Iron ore mine at the Goldsworthy East Iron Ore Project.

Macro Metals Chairman Peter Huljich stated *“We are thrilled with the outcomes of the gravity survey which has revealed two very considerable targets. Of the two target zones defined we are particularly excited by the similar characteristics of the North-West target to Goldsworthy with both being gravity highs, magnetic lows and coincident with topographic highs. Defining a target of over 1.5km length directly along strike from one of the flagship Iron Ore assets in Western Australia is an exciting development for the company. The proximity of these targets to the existing mine enhances the project's strategic advantage, benefiting from established infrastructure and logistics in the region.”*

The Goldsworthy East Iron Ore project is located 90km east of Port Headland in Western Australia on exploration licence application E 45/6365.

The project sits 1,500m east-north-east along strike of the Goldsworthy Iron Ore mine which produced 55mt of Iron Ore at 63.5% Fe between 1965 and 1982.

Gravity Survey Overview

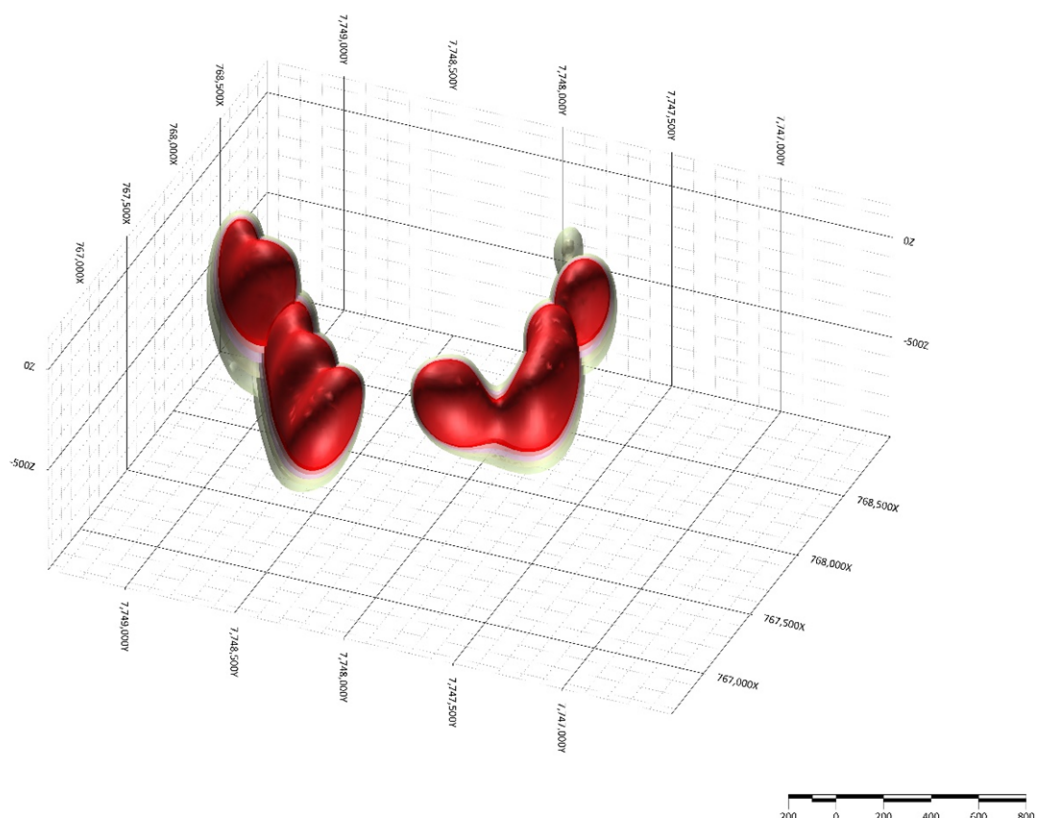


Figure 2: Isometric View of Gravity Anomalies Looking North East

A gravity survey was completed in late May 2023. A total of 666 stations at 200m line intervals by 100m station intervals were taken. A Scintrex CG-5 Autograv Gravity Meter was utilised which can read to better than 0.01 milligals. All downloading and processing of the gravity data is

automated and fully integrated with RTK GPS. All observations are reduced to Bouguer Anomalies at 2.67 density and connected to Australian National Gravity Grid.

Processing and inversion modelling of this data has highlighted two target zones being a north-west gravity-high/magnetic-low coincident with topographic high which the company has interpreted to be a hematite target and a south-eastern gravity and magnetic-high which is interpreted to be a magnetite dominant target.

Geology and Mineralisation

The Project is directly along strike from the Mount Goldsworthy Mine with identical geological sequences and features. Iron mineralisation is developed within the underlying Palaeo- to Mesoarchaeon granite greenstone terrane. The greenstone belt stratigraphy has been subdivided into the lower dominantly volcanic Warrawoona Group of the Pilbara Supergroup and the upper mainly sedimentary Gorge Creek Group which belongs to the De Grey Supergroup. The Warrawoona Group has been subdivided into three main (ultra)mafic-felsic volcanic cycles and is 9 to 18 km thick.

The Mount Goldsworthy, Nimingarra, Sunrise Hill, Shay Gap, Cundaline and Yarrie deposits are distributed in that order over an interval of 85 km from WNW to ESE on the northern margin of the exposed Archaean Pilbara craton in north-western Western Australia. Goldsworthy and Yarrie are ~95 and ~180 km east and ESE of Port Hedland respectively.

The Yarrie and Nimingarra deposits continued operating following the closure of many of the Shay Gap-Sunrise iron deposits in 1993 which had commenced mining in 1972 and had in turn overlapped with and replaced the Mt Goldsworthy mine in the west that produced ore from 1965 to 1982. All are developed in the same or similar stratigraphy.

Mineralisation is associated with the 1000 m thick, Cleaverville Formation in the lower sections of the Gorge Creek Group. In the Yarrie area, basement granitoids of the Warrawagine batholith are overlain by a 5 to 15 m thick basal quartzite, which is succeeded in turn by 400 m of banded iron formation (BIF), the Nimingarra Iron Formation, which is the basal member of the Cleaverville Formation and can be correlated with the footwall sequence at Mt Goldsworthy, 90 km to the west. Discontinuous, thin mudstone units in the lower sections of the BIF can be correlated with similar bands in the other deposits between Yarrie and Mt Goldsworthy. To the north, the BIF is overlain by red shale of the upper Cleaverville Formation. The host sequence is composed of steeply (50 to 75°) dipping banded iron formation, shale, mudstone and chert horizons, intruded to the south by a 2600 Ma granitoid batholith. The Cleaverville Formation is overlain by a transition zone into a sequence of andesitic volcanics.

Proposed Work

A field program to assess site logistics and assist with drill planning is underway and further updates with respect to the granting of tenure will be provided to market as it becomes available.

This announcement is authorised for release by the Board of Directors of Macro Metals Limited.

For further information, please contact:

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Competent Person's Statement

The information in this announcement that relates to the Exploration Results for Goldsworthy East Project is based on information compiled and fairly represented by Mr Robert Jewson, who is a Member of the Australian Institute of Geoscientists and consultant to Macro Metals Ltd. Mr Jewson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jewson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.



Table 1: JORC Code, 2012 Edition. Section 1.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Approximately 666 gravity stations at 200m line intervals by 100m station intervals were taken. Survey control for each gravity station was obtained using Fast Static/RTK GPS method with 5cm vertical and horizontal accuracy All gravity station observations were read to accuracy of 0.01 milligals recorded using a Scintrex CG-5 Autograv Gravity Meter All processing to bouguer anomalies was completed each evening
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Not applicable- no drilling has been undertaken
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Not applicable- no drilling has been undertaken
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Not applicable- no drilling has been undertaken



Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Not applicable- no drilling has been undertaken.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • A Scintrex CG-5 Autograv Gravity Meter was utilised which can read to better than 0.01 milligals. All gravity surveys are read in closed loops as regularly as possible. All downloading and processing of the gravity data is highly automated and fully integrated with the GPS solutions. All observations are reduced to Bouguer Anomalies at 2.67 density and connected to the Australian National Gravity Grid. Data is checked and plotted using GEOSOFT. • 2% of gravity stations are conducted as duplicate readings to verify the quality of the collected data. Repeat observations are the only way to truly check on the quality control. As a minimum the last observation of the previous days work is repeated to allow a build up of checks on a daily basis. Additional repeats will be taken where practically convenient. This form of operation does not hinder production but provides a robust check on quality.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Not applicable- no drilling has been undertaken
<i>Location of data points</i>	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> 	<ul style="list-style-type: none"> • Co-ordinates are provided in the Geocentric Datum of Australia (GDA94) zone 50.



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • A total of 666 stations at 200m line intervals by 100m station intervals were taken. A Scintrex CG-5 Autograv Gravity Meter was utilised which can read to better than 0.01 milligals. All downloading and processing of the gravity data is automated and fully integrated with RTK GPS. All observations are reduced to Bouguer Anomalies at 2.67 density and connected to Australian National Gravity Grid. • Survey data is for geophysical interpretation purposes in order to define dense features warranting further investigation
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • Station readings were taken perpendicular to the inferred strike of the prospective mineralised horizons along strike from the Goldsworthy deposit.
<i>Sample security</i>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Not applicable- no drilling has been undertaken
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • No reviews or audits have been undertaken.

Table 2: JORC Code, 2012 Edition. Section 2.

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> • <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	<ul style="list-style-type: none"> • E46/6248 is in the Pilbara region of Western Australia and is currently under application.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • A full search and compilation of historic exploration has been completed. • No material exploration activities were recorded on the tenure.
<i>Geology</i>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Target mineralisation is hematite Iron Ore mineralisation similar to the Goldsworthy deposit. The northern gravity target has been interpreted to be of this style being a gravity high and magnetic low. The southern target is interpreted to be



Criteria	JORC Code explanation	Commentary
		magnetite mineralisation being a coincident magnetic and gravity high.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> Not applicable- no drilling has been undertaken
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Not applicable- no drilling has been undertaken
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> A geophysical interpretation based on processing has been included in the body of the release along with text based descriptions on the geometry
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Maps and cross sections are included in the body of the announcement.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be</i> 	<ul style="list-style-type: none"> All relevant results are reported.



Criteria	JORC Code explanation	Commentary
	<i>practiced to avoid misleading reporting of Exploration Results.</i>	
<i>Other substantive exploration data</i>	<ul style="list-style-type: none">• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<ul style="list-style-type: none">• All relevant data are reported in this release.
<i>Further work</i>	<ul style="list-style-type: none">• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<ul style="list-style-type: none">• Field work, including mapping and sampling, to better evaluate mineralised areas is planned.• Drilling to follow pending positive mapping sampling and receipt of all statutory approvals to drill.